

ARIZONA CATTLE GROWERS' ASSOCIATION, JEFF MENGES, Plaintiffs-Appellees-Cross-Appellants, v. UNITED STATES FISH AND WILDLIFE, BUREAU OF LAND MANAGEMENT, Defendants-Appellants- Cross-Appellees, and SOUTHWEST CENTER FOR BIOLOGICAL DIVERSITY, Defendant-Intervenor-Appellant.

Nos. 99-16102, 99-16103, 00-15322, 00-15511

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

273 F.3d 1229;2001 U.S. App. LEXIS 26821;53 ERC (BNA) 1904;2001 Cal. Daily Op. Service 10416;2001 Daily Journal DAR 13005

March 14, 2001, Argued and Submitted, San Francisco, California

December 17, 2001, Filed

PRIOR HISTORY: [*1] Appeal from the United States District Court for the District of Arizona. D.C. Nos. CV-97-02416-DAE, CV-99-0673-RCB. Robert C. Broomfield and David Alan Ezra, District Court Judges, Presiding. Arizona Cattle Growers' Assoc. v. United States Fish & Wildlife Serv., 63 F. Supp. 2d 1034, 1998 U.S. Dist. LEXIS 22388, 1998 U.S. Dist. LEXIS 22160, 49 Env't. Rep. Cas. (BNA) 1371 (D. Ariz. 1998).

DISPOSITION: AFFIRMED, as to D.C. No. CV-97-02416-DAE. AFFIRMED IN PART AND REVERSED IN PART, as to D.C. No. CV-99-0673-RCB.

COUNSEL: M. Alice Thurston (argued), United States Department of Justice, for the defendants-appellants-cross-appellees. Lois J. Schiffer (on brief), Assistant Attorney General, Environment and Natural Resources Division, for the defendants-appellants-cross-appellees. Samuel D. Rauch (on brief), United States Department of Justice, for the defendants-appellants-cross-appellees. Ellen Durkee (on brief), United States Department of Justice, for the defendants-appellants-cross-appellees. Norman D. James (argued), Fennemore Craig, for the plaintiffs-appellees-cross-appellants. Jay L. Shapiro (on brief), Fennemore Craig, for the plaintiffs-appellees-cross-appellants. Geoff Hickox (on brief), Kenna & Hickox, for the defendant-intervenor-appellant. M. Reed Hopper (on brief), Pacific Legal Foundation, for the amicus curiae.

JUDGES: Before: John T. Noonan, M. Margaret McKeown, and Kim McLane Wardlaw, Circuit Judges. Opinion by Judge Wardlaw.

OPINIONBY: Kim McLane Wardlaw

OPINION: [*2] WARDLAW, Circuit Judge: At issue in these

consolidated cross-appeals is whether the United States Fish and Wildlife Service's provision of Incidental Take Statements pursuant to the Endangered Species Act was arbitrary and capricious under Section 706 of the Administrative Procedure Act. In separate actions, the Arizona Cattle Growers' Association ("ACGA") challenged the Incidental Take Statements set forth in the Biological Opinions issued by the Fish and Wildlife Service in consultation with the Bureau of Land Management (ACGA I) and the United States Forest Service (ACGA II) in response to ACGA's application for cattle grazing permits in Southeastern Arizona. In the district courts, each of the Incidental Take Statements was set aside, with one exception, as arbitrary and capricious actions by the Fish and Wildlife Service, due to insufficient evidence of a take. We hold, based on the legislative history, case law, prior agency representations, and the plain language of the Endangered Species Act, that an Incidental Take Statement must be predicated on a finding of an incidental take. Further, the Fish and Wildlife Service acted in an arbitrary and capricious manner by issuing [*3] Incidental Take Statements imposing terms and conditions on land use permits, where there either was no evidence that the endangered species existed on the land or no evidence that a take would occur if the permit were issued. We also find that it was arbitrary and capricious for the Fish and Wildlife Service to issue terms and conditions so vague as to preclude compliance therewith.

I. Background A. ACGA I
Arizona Cattle Growers' Association and Jeff Menges, a rancher seeking a grazing permit on the lands at issue (collectively "ACGA"), sued the Fish and Wildlife Service and the Bureau of Land Management to challenge Incidental Take Statements issued by the Fish and Wildlife Service in a Biological Opinion for certain grazing lands. *Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife Serv.*, 63 F. Supp. 2d 1034 (D. Ariz. 1998) (Ezra, C. J., presiding) ("ACGA I"). Menges sought livestock grazing permits for land within the area supervised by the Bureau of Land Management's Safford and Tucson, Arizona field offices, and the Association represented members who claimed to be harmed by the government action. The Bureau of Land Management's livestock grazing [*4] program for this area affects 288 separate grazing allotments that in total comprise nearly 1.6 million acres of land. The Fish and Wildlife Service's Biological Opinion, issued on September 26, 1997, analyzes twenty species of plants and animals and concludes that the livestock grazing program was not likely to jeopardize the continued existence of the species affected nor was likely to result in destruction or adverse modification of the designated or proposed critical habitat. The Fish and Wildlife Service did, however, issue Incidental Take Statements for various species of fish and wildlife listed or proposed as endangered. ACGA's suit challenged both the Incidental Take Statements and their terms and conditions. The matter was adjudicated by way of cross-motions for summary judgment. ACGA's

summary judgment motion focused on two of the ten Incidental Take Statements, those for the razorback sucker and the cactus ferruginous pygmy-owl. The district court first determined that ACGA enjoyed representational standing to sue for injuries relating to all allotments affected by the Incidental Take Statements. It then held that the Fish and Wildlife Service's issuance of an Incidental [*5] Take Statement for both the razorback sucker and the pygmy-owl was arbitrary and capricious, reasoning that the Fish and Wildlife Service "failed to provide sufficient reason to believe that listed species exist in the allotments in question." 63 F. Supp. 2d at 1045. In light of this holding, the court did not reach ACGA's objections to the terms and conditions of the Incidental Take Statements. It therefore granted ACGA's motion for partial summary judgment, following which ACGA stipulated to dismissal without prejudice of the other claims. A final judgment setting aside the Incidental Take Statements for the pygmy-owl and razor-back sucker was entered. The Fish and Wildlife Service, together with the Bureau of Land Management, timely filed its notice of appeal. At the request of the Bureau of Land Management and the Fish and Wildlife Service, the parties agreed to stay the appeal pending judgment in the second action, ACGA II.**B. ACGA II** In ACGA II, ACGA n1 challenged Incidental Take Statements set forth in a second Biological Opinion issued by the Fish and Wildlife Service that concerns livestock grazing on public lands administered by the United States Forest Service. [*6] Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife Serv., No. 99-0673 (D. Ariz. Dec. 14, 1999) (Broomfield, J., presiding) ("ACGA II"). The Fish and Wildlife Service examined 962 allotments, determining that grazing would have no effect on listed species for 619 of those allotments and cause no adverse effects for 321 of the remaining allotments, leaving 22 allotments. These allotments were each roughly 30,000 acres, but several of the allotments were significantly larger. In its Biological Opinion, the Fish and Wildlife Service concluded that ongoing grazing activities on 21 out of the 22 allotments at issue would not jeopardize the continued existence of any protected species or result in the destruction or adverse modification of any critical habitat. It determined, however, that ongoing grazing activities would incidentally take members of one or more protected species in each of the 22 allotments, and it issued Incidental Take Statements for each of those allotments. ACGA contested the issuance of Incidental Take Statements for six of the allotments: Cow Flat, East Eagle, Montana, Sears-Club/Chalk Mountain, Sheep Springs, and Wildbunch.- - - - -Footnotes- - - - -
- - - - -n1 Menges was not a party to this
litigation.- - - - -End Footnotes- - - - -
- - - - - [*7] The parties filed cross-motions
for summary judgment. Rejecting the government's arguments that
the term "taking" should be interpreted more broadly in a Section

7 consultation case than in a Section 9 injunctive relief case, the district court held that the "the term 'take' as used in Section 7(b)(4) of the Endangered Species Act ("ESA") has an identical meaning as when used in Section 9." With that interpretation in mind, the district court examined the Biological Opinion to determine whether the evidence relied upon by the Fish and Wildlife Service was rationally connected to its decision to issue Incidental Take Statements for the six allotments at issue. With respect to all but the Cow Flat Allotment, the district court held that the Fish and Wildlife Service acted arbitrarily and capriciously in issuing an Incidental Take Statement based on a Biological Opinion that fails to show a take was reasonably certain to occur. As to the Cow Flat Allotment, the district court found that based upon the evidence in the Biological Opinion, the Fish and Wildlife Service could reasonably determine that takings were likely to occur when livestock entered the river, and therefore upheld the [*8] Incidental Take Statement for that allotment. The court then ruled that neither the specificity of the anticipated take provision nor the "reasonable and prudent measures" condition was arbitrary and capricious. It therefore granted the Fish and Wildlife Service's motion for summary judgment as to the Cow Flat Allotment and ACGA's motion for summary judgment as to the East Eagle, Montana, Sears-Club/Chalk Mountain, Sheep Springs, and Wildbunch allotments. The Fish and Wildlife Service appealed the district court's rulings only as they concerned the East Eagle, Montana, Sears-Club/Chalk Mountain and Wildbunch allotments. ACGA cross-appealed the district court's Cow Flat Allotment rulings.

II. Jurisdiction and Standing Final agency actions are reviewable by federal courts under section 704 of the Administrative Procedure Act ("APA"), 5 U.S.C. 551-559, 701-706 (1994 & Supp. IV 1998). The issuance of a Biological Opinion as well as an accompanying Incidental Take Statement are considered final agency actions. *Bennett v. Spear*, 520 U.S. 154, 178, 137 L. Ed. 2d 281, 117 S. Ct. 1154 (1997) (holding that the Biological Opinion is a final agency [*9] action because it has "direct and appreciable legal consequences"); *Southwest Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*, 143 F.3d 515, 522 (9th Cir. 1998). In ACGA I, the district court considered at length the question of ACGA's standing to challenge a majority of the Incidental Take Statements at issue, and found that ACGA possessed representational standing to sue for injuries relating to all allotments affected by the Biological Opinion and not just those allotments that affect co-appellee and ACGA member Menges. See ACGA I, 63 F. Supp. 2d at 1038-42. Although the Fish and Wildlife Service did not attempt to resurrect the issue of standing on appeal, "federal courts are under an independent obligation to examine their own jurisdiction, and standing 'is perhaps the most important of [the jurisdictional] doctrines.'" *FW/PBS Inc. v. Dallas*, 493 U.S. 215, 231, 107 L. Ed. 2d 603, 110

S. Ct. 596 (1990) (quoting *Allen v. Wright*, 468 U.S. 737, 750, 82 L. Ed. 2d 556, 104 S. Ct. 3315 (1984)). We have considered therefore the question of standing anew and agree with the district court's analysis and conclusion [*10] that ACGA enjoys standing to maintain these appeals.

III. Standard of Review These cases arise as a challenge to the Fish and Wildlife Service's interpretation of the mandates of the ESA and its subsequent actions in issuing Incidental Take Statements. Although the parties agree that the agency action must be reviewed under the APA §§ 706 arbitrary and capricious standard, the Fish and Wildlife Service strenuously objects both to the ACGA I district court's requirement that it provide some evidence that the species existed, and could therefore be harmed by the regulated land use, and to the ACGA II district court's use of a "reasonable certainty" standard to evaluate whether the agency acted in an arbitrary and capricious manner.

A. Judicial Review of Agency Action Judicial review of administrative decisions involving the ESA is governed by section 706 of the APA. 5 U.S.C. §§ 706; *Pyramid Lake Paiute Tribe of Indians v. U.S. Dep't of the Navy*, 898 F.2d 1410, 1414 (9th Cir. 1990). Under section 706, the reviewing court must determine that agency decisions are not "arbitrary, capricious, an abuse of discretion, or otherwise not in [*11] accordance with law." 5 U.S.C. §§ 706(2)(A); *Pyramid Lake Paiute Tribe of Indians*, 898 F.2d at 1414. The arbitrary and capricious test is a narrow scope of review of agency factfinding. *Abbott Labs., Inc. v. Gardner*, 387 U.S. 136, 18 L. Ed. 2d 681, 87 S. Ct. 1507 (1967). To determine whether an agency violated the arbitrary and capricious standard, this court must determine whether the agency articulated a rational connection between the facts found and the choice made. *Pyramid Lake Paiute Tribe of Indians*, 898 F.2d at 1414 (citing *Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976, 982 (9th Cir. 1985)). The court is not empowered to substitute its judgment for that of the agency. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416, 28 L. Ed. 2d 136, 91 S. Ct. 814 (1971). As long as the agency decision was based on a consideration of relevant factors and there is no clear error of judgment, the reviewing court may not overturn the agency's action as arbitrary and capricious. *Amer. Hosp. Ass'n v. NLRB*, 499 U.S. 606, 113 L. Ed. 2d 675, 111 S. Ct. 1539 (1991); [*12] *Citizens to Preserve Overton Park, Inc.*, 401 U.S. at 402 (1971). The basis for the decision, however, must come from the agency. The reviewing court may not substitute reasons for agency action that are not in the record. See *Camp v. Pitts*, 411 U.S. 138, 142, 36 L. Ed. 2d 106, 93 S. Ct. 1241 (1973) ("The focal point for judicial review is the administrative record in existence"). We are deferential to the agency's expertise in situations, like that here, where "resolution of this dispute involves primarily issues of fact." *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377, 104 L. Ed. 2d 377, 109 S. Ct. 1851 (1989) ("Because analysis of the relevant

documents 'requires a high level of technical expertise,' we must defer to the informed discretion of the responsible federal agencies.") (citations omitted). Deference is particularly important "when the agency is 'making predictions, within its area of special expertise, at the frontiers of science.'" *Central Ariz. Water Conservation Dist. v. EPA*, 990 F.2d 1531, 1539-40 (9th Cir. 1993) (quoting *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103, 76 L. Ed. 2d 437, 103 S. Ct. 2246 (1983)). [*13] Therefore, the reviewing court may set aside only those conclusions that do not have a basis in fact, not those with which it disagrees. *Bureau of Indian Affairs v. FLRA*, 887 F.2d 172, 176 (9th Cir. 1989); *Love v. Thomas*, 858 F.2d 1347 (9th Cir. 1988). Judicial review is meaningless, however, unless we carefully review the record to "ensure that agency decisions are founded on a reasoned evaluation of the relevant factors." *Marsh*, 490 U.S. at 378. Accordingly, while reviewing courts should uphold reasonable and defensible constructions of an agency's enabling act, cf. *NLRB v. Local 103, Int'l Ass'n of Bridge, Structural & Ornamental Iron Workers*, 434 U.S. 335, 350, 54 L. Ed. 2d 586, 98 S. Ct. 651 (1978) (NLRA construction), they must not "rubber-stamp ... administrative decisions that they deem inconsistent with a statutory mandate or that frustrate the congressional policy underlying a statute." *NLRB v. Brown*, 380 U.S. 278, 291-92, 13 L. Ed. 2d 839, 85 S. Ct. 980 (1965). **B.**

Judicial Review of Agency Interpretation of a Statute Generally, courts review agency interpretation of a statute under [*14] the two-part *Chevron* test. *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 81 L. Ed. 2d 694, 104 S. Ct. 2778 (1984). Under step one of *Chevron*, the court must decide independently whether Congress "has directly spoken to the precise question at issue." *Id.* at 842. If the court is unable to conclude that Congress has precisely spoken, it is to defer to any "permissible" or "reasonable" interpretation of the agency. *Id.*; see also Christopher Schroeder & Robert Glicksman, *Chevron, State Farm, and EPA in the Courts of Appeals During the 1990s*, 31 *Env'tl. L. Rep.* 10371, 10375-79 (documenting application of *Chevron* doctrine in EPA cases). The Supreme Court, however, has "explicitly limited" *Chevron*'s deference "to cases in which congressional intent cannot be discerned through the use of the traditional techniques of statutory interpretation." *Chem. Mfr. Ass'n v. Natural Res. Def. Council, Inc.*, 470 U.S. 116, 152, 84 L. Ed. 2d 90, 105 S. Ct. 1102 (1985). Ultimately, "the judiciary is the final authority on issues of statutory construction and must reject administrative constructions [*15] which are contrary to clear congressional intent." *Chevron*, 467 U.S. at 843 n.9. **IV.**

Defining "Taking" in Light of Section 7 and Section 9 of the ESA In the district court, the Fish and Wildlife Service argued that the word "taking" as used in ESA Section 7(b)(4) should be interpreted more broadly than in the context of Section 9 of the ESA, relying upon the different purposes, i.e., protective

(Section 7) as opposed to punitive (Section 9), served by each Section. Specifically, it argued that a taking as construed in Section 7 should encompass those situations in which harm to a listed species was "possible" or "likely" in the future due to the proposed action. The district court rejected this contention, and although the Fish and Wildlife Service states that it has abandoned this argument on appeal, it nevertheless maintains that the Section 7 incidental take definition should be interpreted more broadly than the definition of a take under Section 9. In light of our ruling that an Incidental Take Statement is appropriate only where a taking will occur, however, it is necessary to address the issue. We believe that Congress has spoken to the precise question [*16] at issue and agree with the district court that the definition of "taking" in Sections 7 and 9 of the ESA are identical in meaning and application.

A. Section 9 of the Endangered Species Act Section 9 of the ESA, 16 U.S.C. 1531-1544 (1994), prohibits, among other actions, the "take" of an animal that is listed as an endangered species. 16 U.S.C. §§ 1538 (a)(1)(B). A species is "endangered," and thus protected by the ESA, if it is listed by the Secretary of Fish and Wildlife Service pursuant to 16 U.S.C. §§ 1533. The ESA defines "taking" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. §§ 1532(19). The implementing regulations further define the terms "harass" and "harm." "Harass ...means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering." 50 C.F.R. §§ 17.3. The definition [*17] of harm, upheld by the Supreme Court, is "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." 50 C.F.R. §§ 17.3; *Babbitt v. Sweet Home Chapter of Cmty. for a Greater Or.*, 515 U.S. 687, 696-700, 132 L. Ed. 2d 597, 115 S. Ct. 2407 (1995). We have recently further elaborated on the question of when habitat modification will constitute harm:

Harming a species may be indirect, in that the harm may be caused by habitat modification, but habitat modification does not constitute harm unless it "actually kills or injures wildlife." The Department of Interior's definition of harm was upheld against a facial challenge to its validity in [*Babbitt*]. In upholding the definition of "harm" as encompassing habitat modification, the Supreme Court emphasized that "every term in the regulation's definition of 'harm' is subservient to the phrase 'an act which actually kills or injures wildlife.'"

Defenders of Wildlife v. Bernal, 204 F.3d 920, 924-25 (9th Cir. 1999) [*18] (citation omitted); see also Marbled Murrelet v. Babbitt, 83 F.3d 1060 (9th Cir. 1996) (discussing generally the propriety of projecting harm through habitat modification so long as the habitat modification will cause actual killing or injury of protected species). Other courts similarly have found that an activity may constitute "harm," even though the harm is indirect and prospective. See, e.g., Greenpeace v. Nat'l Marine Fisheries Serv., 106 F. Supp. 2d 1066 (W. D. Wash. 2000) (finding that Alaskan fisheries' operations may constitute a taking of the Stellar sea lion because the fisheries are catching fish normally eaten by the sea lion); Bensman v. U.S. Forest Serv., 984 F. Supp. 1242 (W.D. Mo. 1997) (holding that removal of dead trees used by the Indiana bat for habitat and hibernation may constitute a taking). In National Wildlife Federation v. Burlington Northern Railroad, 23 F.3d 1508 (9th Cir. 1994), however, we held that mere habitat degradation is not always sufficient to equal harm. To regulate habitat degradation that merely retards recovery of a depleted species, "[plaintiff] would [*19] have to show significant impairment of the species' breeding or feeding habits and prove that the habitat degradation prevents, or possibly, retards, recovery of the species." Id. at 1513 (emphasis in original). Likewise, the Fish and Wildlife Service's statement adopts this definition of "harm:" "Such act may include significant habitat modification or degradation where it actually kills or injures wildlife ..." 50 C.F.R. §§ 17.3.

The word 'actually' before the words 'kills or injures' ...makes it clear that habitat modification or degradation, standing alone, is not a taking pursuant to section 9. To be subject to section 9, the modification or degradation must be significant, must significantly impair essential behavioral patterns, and must result in actual injury to a protected wildlife species.

46 FR 54748 (1981) (emphasis in original). Violators of the ESA, including agencies and their employees, are subject to substantial civil and criminal penalties, including imprisonment, under Section 9 of the Act. Private citizens, as well as government entities, may bring suit to enjoin such violations. [*20] 16 U.S.C. §§ 1540(a), (b), (e), (g). **B. Section 7 of the ESA** Section 7 of the Act imposes an affirmative duty to prevent violations of Section 9 upon federal agencies, such as the Bureau of Land Management and the U.S. Forest Service. 16 U.S.C. §§ 1536(a)(2). This affirmative duty extends to "any action authorized, funded, or carried out by such agency," including authorizing grazing permits on land owned by the federal government. Id. To determine whether an "action may affect listed species or critical habitat," the agency may be required to create a Biological Assessment that "evaluates the potential

effects of the action on listed and proposed species and ... critical habitat and determines whether any such species or habitat are likely to be adversely affected by the action." 50 C.F.R. §§ 402.12. If the agency finds evidence of an adverse impact on any issued species, it must initiate formal consultation with the Fish and Wildlife Service. 50 C.F.R. §§ 402.14. If formal consultation is necessary, the Fish and Wildlife Service will issue a Biological Opinion, summarizing [*21] the relevant findings and determining whether the proposed action is likely to jeopardize the continued existence of the species. 16 U.S.C. §§ 1536(b). If so, the Biological Opinion must list any "reasonable and prudent alternatives" that, if followed, would not jeopardize the continued existence of the species. 16 U.S.C. §§ 1536(b)(3)(A); 50 C.F.R. §§ 402.14. Additionally, the Fish and Wildlife Service must specify whether any "incidental taking" of protected species will occur, specifically "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." 16 U.S.C. §§ 1536(b)(4); 50 C.F.R. §§ 17.3. Its determination that an incidental taking will result leads to the publication of the "Incidental Take Statement," identifying areas where members of the particular species are at risk. Contained in the Incidental Take Statement is an advisory opinion which:

(i) specifies the impact of such incidental taking on the species, (ii) specifies those reasonable and prudent measures that [*22] the Secretary considers necessary or appropriate to minimize such impact [and] ... (iv) sets forth the terms and conditions ... that must be complied with by the Federal agency or applicant ... or both, to implement the measures specified under clause (ii).

16 U.S.C. §§ 1536(b)(4) (subsection (iii) omitted). Significantly, the Incidental Take Statement functions as a safe harbor provision immunizing persons from Section 9 liability and penalties for takings committed during activities that are otherwise lawful and in compliance with its terms and conditions. 16 U.S.C. §§ 1536(o). Any such incidental taking "shall not be considered to be a prohibited taking of the species concerned." *Id.* Although the action agency is "technically free to disregard the Biological Opinion and proceed with its proposed action ... it does so at its own peril." *Bennett*, 520 U.S. at 170. Consequently, if the terms and conditions of the Incidental Take Statement are disregarded and a taking does occur, the action agency or the applicant may be subject to potentially severe civil and criminal penalties under Section 9. **C. Reconciling** [*23] **"Taking" as used in Section 9 with Section 7** The structure of the ESA and the legislative history clearly show Congress's intent to enact one standard for "taking" within both Section 7(b)(4), governing the creation of Incidental Take Statements, and Section

9, imposing civil and criminal penalties for violation of the ESA. In 1982, Congress amended the ESA to include Section 7(b)(4) to resolve the conflict between Sections 7 and 9. See H.R. Rep. No. 97-567, at 15 (1982). As noted in the legislative reports, the

purpose of Section 7(b)(4) and the amendment to Section 7(o) is to resolve the situation in which a Federal agency or a permit or license applicant has been advised that the proposed action will not violate Section 7(a)(2) of the Act but the proposed action will result in the taking of some species incidental to that action --a clear violation of Section 9 of the Act which prohibits any taking of a species.

H.R. Rep. No. 97-567, at 26 (1982), reprinted in 1982 U.S.C.C.A.N. 2807, 2826. Absent an actual or prospective taking under Section 9, there is no "situation" that requires a Section 7 safe harbor provision. We reject the argument that "taking" [*24] should be applied differently because the two sections serve different purposes. Interpreting the statutes in the manner urged by the Fish and Wildlife Service could effectively stop the proposed cattle grazing entirely. Such a broad interpretation would allow the Fish and Wildlife Service to engage in widespread land regulation even where no Section 9 liability could be imposed. This interpretation would turn the purpose behind the 1982 Amendment on its head. This conclusion follows as a practical matter from the statutory scheme. Because of the potential liability imposed on federal agencies whose actions do not comply with conditions in the Incidental Take Statement, agencies regulating land are unlikely to permit nonconforming uses of their land. For this reason, as the Supreme Court has recognized, Biological Opinions exert a "powerful coercive effect" in shaping the policies of the federal agencies whose actions are at issue. Bennett, 520 U.S. at 169 (citations omitted). Here, for example, although ACGA theoretically could choose to disregard the Incidental Take Statements without explanation, the Bureau of Land Management and the Forest Service, as the action [*25] agencies, "must not only articulate [their] reasons for disagreement (which ordinarily requires species and habitat investigations that are not within the action agency's expertise), but ...[they run] a substantial risk if [their] (inexpert) reasons turn out to be wrong." Id. As the Bennett Court noted, the action agency rarely, if ever, chooses to disregard the terms and conditions of an Incidental Take Statement. In fact, the Incidental Take Statement challenged in ACGA I began by stating, "the measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the

applicant" As a practical matter, if ACGA's members wish to receive grazing permits, they must comply with the terms and conditions of the Incidental Take Statements. As the district court held in ACGA II, "if Fish and Wildlife Service could issue an Incidental Take Statement even when a taking in violation of Section 9 was not present, those engaging in legal activities would be subjected to the terms and conditions of such statements." The court finds no authority for this result nor do we.

V. Determining [*26] When the Fish and Wildlife Service Must Issue an Incidental Take Statement

The Fish and Wildlife Service contends that the district courts erred in scrutinizing its decision to issue Incidental Take Statements because it is statutorily required pursuant to the ESA to "issue an ITS in all no-jeopardy determinations." In particular, it contests the ACGA I court's requirement that it provide evidence of a listed species' existence on the land and the ACGA II court's holding that issuing an Incidental Take Statement is "appropriate only when a take has occurred or is reasonably certain to occur." The Fish and Wildlife Service argues that both standards establish "an inappropriate and high burden of proof" and that it should be permitted to issue an Incidental Take Statement whenever there is any possibility, no matter how small, that a listed species will be taken. As we believe that Congress has spoken to the precise question at issue, we must reject the agency's interpretation of the ESA as contrary to clear congressional intent. See *Chevron*, 467 U.S. at 842. ACGA correctly states that this argument was not presented in the district courts, and urges us to decline [*27] to entertain it. We maintain the discretion to review a purely legal issue, including the interpretation of a statute, however, that is made for the first time on appeal unless the other party would be prejudiced by the failure to raise the issue at the district court. *Kimes v. Stone*, 84 F.3d 1121, 1126 (9th Cir. 1996); *United States v. Patrin*, 575 F.2d 708, 712 (9th Cir. 1978). Because ACGA could not have presented facts beyond those already contained in the Administrative Record, reviewing this matter now will not prejudice either party. Therefore, we exercise our discretion to consider the purely legal question whether an Incidental Take Statement is mandatory in every consultation irrespective of whether an incidental taking will occur. The Fish and Wildlife Service argues that the plain language of the statute and implementing regulations "expressly direct" it to issue an Incidental Take Statement in every case. Section 7(b)(4) of the ESA provides:

If after consultation under subsection (a)(2) of this section, the Secretary concludes that--(A) the agency action will not violate such subsection, or offers reasonable and prudent [*28] alternatives which the Secretary believes would not violate such subsection; (B) the taking of an endangered species or a threatened species incidental to the

agency action will not violate such subsection; and (C) if an endangered species or threatened species of a marine mammal is involved, the taking is authorized pursuant to section 1371(a)(5) of this title; the Secretary shall provide the Federal agency and the applicant concerned, if any, with a written statement that--(i) specifies the impact of such incidental taking on the species,

16 U.S.C. §§ 1536(b)(4). The Fish and Wildlife Service relies on the statutory provision directing the Secretary to provide "a written statement that ...specifies the impact of such incidental taking on the species." *Id.* It is a "fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." *Davis v. Mich. Dep't of Treasury*, 489 U.S. 803, 809, 103 L. Ed. 2d 891, 109 S. Ct. 1500 (1989). "A court must therefore interpret the statute as a symmetrical and coherent [*29] regulatory scheme and fit, if possible, all parts into an harmonious whole," *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 133, 146 L. Ed. 2d 121, 120 S. Ct. 1291 (2000) (citations omitted). When read in context, it is clear that the issuance of the Incidental Take Statement is subject to the finding of the factors enumerated in the ESA. The statute explicitly provides that the written statement is subject to the consultation and the Secretary's conclusions. A contrary interpretation would render meaningless the clause stating that the Incidental Take Statement will specify "the impact of such incidental taking." 16 U.S.C. §§ 1536(b)(4)(C)(i) (emphasis added). We therefore agree with ACGA that the plain language of the ESA does not dictate that the Fish and Wildlife Service must issue an Incidental Take Statement irrespective of whether any incidental takings will occur. See *Nat'l Wildlife Fed'n v. Nat'l Park Serv.*, 669 F. Supp. 384, 389-90 (D.Wyo. 1987) (holding that a careful reading of §§ 1536(b) supports the defendants' contention that an Incidental Take Statement is not required if no incidental [*30] takings are foreseen). The plain language of the implementing regulations also supports ACGA's argument. One regulation specifically instructs the Fish and Wildlife Service that its "responsibilities during formal consultation are ...to formulate a statement concerning incidental take, if such take may occur." 50 C.F.R. §§ 402.14(g)(7) (emphasis added). Moreover, the same regulation also instructs:

(1) In those cases where the Service concludes that an action (or the implementation of any reasonable and prudent alternatives) and the resultant incidental take of listed species will not violate section 7(a)(2), ...the Service will provide with the biological opinion a statement concerning incidental take that: (i) Specifies the impact, i.e., the amount or extent, of such incidental taking on the

species;

50 C.F.R. §§ 402.14(i)(1) (2001). Thus, consistent with the language of the statute, the regulations only require the issuance of an Incidental Take Statement when the "resultant incidental take of listed species will not violate section 7(a)(2)." Id. (emphasis added). Likewise, the legislative history [*31] supports this interpretation of the statute. If the sole purpose of the Incidental Take Statement is to provide shelter from Section 9 penalties, as previously noted, it would be nonsensical to require the issuance of a Incidental Take Statement when no takings cognizable under Section 9 are to occur. See H.R. Rep. No. 97-567, at 26 (1982). The Fish and Wildlife Service's internal handbook does not alter our conclusion. The 1998 version of the agency's Section 7 Consultation Handbook provides that "when no take is anticipated" the agency should include in an Incidental Take Statement the following language: "The Service does not anticipate the proposed action will incidentally take any (species)." Indeed, one of Incidental Take Statements in the ACGA II consultation that the Fish and Wildlife Service issued contains this very language. That Incidental Take Statement, however, is not before us in this appeal. It is true that "an agency's construction of the laws it administers is accorded considerable weight." Chevron, 467 U.S. at 844. We reiterate, however, that "the judiciary is the final authority on issues of statutory construction and must reject administrative [*32] constructions which are contrary to clear congressional intent." 467 U.S. at 843 n.9. The Fish and Wildlife Service's handbook instruction to issue an Incidental Take Statement when no take will occur as a result of permitted activity is contrary to the plain meaning of the statute as well as the agency's own regulations. Accordingly, we hold that absent rare circumstances such as those involving migratory species, it is arbitrary and capricious to issue an Incidental Take Statement when the Fish and Wildlife Service has no rational basis to conclude that a take will occur incident to the otherwise lawful activity.

VI. Review of the Incidental Take Statements under the Arbitrary and Capricious Standard Pursuant to the APA Because we reject the Fish and Wildlife Service's interpretation of the ESA and hold that it is not required to provide an Incidental Take Statement whenever it issues a Biological Opinion, we must now examine each Incidental Take Statement at issue under Section 706. 5 U.S.C. §§ 706. As a preliminary matter, however, we must address the ACGA II court's application of a "reasonable certainty" standard, about which the Fish [*33] and Wildlife Service has made much ado. It argues that "the predicate for issuing an ITS should not be a particular level of certainty that a take will occur, the ITS itself must only not be arbitrary and capricious." This argument misapprehends the ACGA II court's

application of the arbitrary and capricious standard to the requirement that the Fish and Wildlife Service must find a take incidental to the otherwise lawful use before it may condition issuance of a permit on enumerated "reasonable and prudent" measures. ACGA II held merely that if the Fish and Wildlife Service cannot satisfy the court to a reasonable certainty that a take will occur, then it is arbitrary and capricious for it to issue an Incidental Take Statement imposing conditions on the use of the land. This is actually a more lenient standard than if the record were required to include evidence of an actual taking incident to the proposed use. Given that the Fish and Wildlife Service must have a reasonable basis to conclude that a take will occur as a result of the anticipated lawful activity, benchmarking such findings against a standard of reasonable certainty puts it to a lesser burden. Moreover, it would be unreasonable [*34] for the Fish and Wildlife Service to impose conditions on otherwise lawful land use if a take were not reasonably certain to occur as a result of that activity. And, as discussed infra, if an Incidental Take Statement is set aside because a take is not reasonably certain to occur, and circumstances change, the Fish and Wildlife Service or the action agency may revisit the issue. 50 C.F.R. §§ 402.16. We need not definitively resolve this question, however, because regardless of the dispute over the ACGA II court's application of the arbitrary and capricious standard, we must review de novo the actions of the Fish and Wildlife Service under the arbitrary and capricious standard mandated by the statute. Therefore, pursuant to Section 706 of the APA, we proceed to determine whether the Incidental Take Statements are founded on a rational connection between the facts found and the choices made by the Fish and Wildlife Service and whether it has committed a clear error of judgment. See *Motor Vehicle Manuf. Assoc. v. State Farm Mutual Auto.*, 463 U.S. 29, 43, 77 L. Ed. 2d 443, 103 S. Ct. 2856 (1983); *Pyramid Lake Paiute Tribe of Indians*, 898 F.2d at 1414. [*35] **A. ACGA I 1. The Razorback Sucker** In the Biological Opinion issued in response to ACGA's first request for land use permits, the Fish and Wildlife Service concluded that the direct effects of cattle grazing are infrequent to the razorback sucker, a moderately sized fish listed as endangered in November 1991. Although once abundant in the project area, the Fish and Wildlife Service admitted that there have been no reported sightings of the razorback sucker in the area since 1991 and that "effects of the livestock grazing program on individual fish or fish populations probably occur infrequently." Nevertheless, the Fish and Wildlife Service issued an Incidental Take Statement for the fish, anticipating take as a result of the direct effects of grazing in the project area, the construction of fences, the construction and existence of stock tanks for non-native fish, as well as other "activities in the watershed." Because the Fish and Wildlife Service could not directly quantify the level of

incidental take, it determined that authorized take would be exceeded if range conditions in the allotment deteriorated and cattle grazing could not be ruled out as a cause of the deterioration. [*36] Despite the lack of evidence that the razorback sucker exists on the allotment in question, the Fish and Wildlife Service argues that it should be able to issue an Incidental Take Statement based upon prospective harm. While we recognize the importance of a prospective orientation, the regulations mandate a separate procedure for reinitiating consultation if different evidence is later developed:

Reinitiation of formal consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (a) If the amount or extent of taking specified in the incidental take statement is exceeded; (b) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) If a new species is listed or critical habitat designated that may be affected by the identified action. [*37]

50 C.F.R. §§ 402.16. Additionally, the ESA provides for the designation of critical habitat outside the geographic area currently occupied by the species when "such areas are essential for the conservation of the species." 16 U.S.C. §§ 1532(5)(A)(ii). Absent this procedure, however, there is no evidence that Congress intended to allow the Fish and Wildlife Service to regulate any parcel of land that is merely capable of supporting a protected species. The only additional evidence that the Fish and Wildlife Service offers to justify its decision is that "small numbers of the juvenile fish ...likely survived" in an unsuccessful attempt to repopulate the project area between 1981-1987. This speculative evidence, without more, is woefully insufficient to meet the standards imposed by the governing statute. See 50 C.F.R. §§ 402.14(g)(8) ("In formulating its biological opinion ...the Service will use the best scientific and commercial data available"). Likewise, the Fish and Wildlife Service failed to present evidence that an indirect taking would occur absent the existence of the species on the

[*38] property. Although habitat modification resulting in actual killing or injury may constitute a taking, the Fish and Wildlife Service has presented only speculative evidence that habitat modification, brought about by livestock grazing, may impact the razorback sucker. The agency has a very low bar to meet, but it must at least attain it. It would be improper to force ACGA to prove that the species does not exist on the permitted area, as the Fish and Wildlife Service urges, both because it would require ACGA to meet the burden statutorily imposed on the agency, and because it would be requiring it to prove a negative. Based on a careful review of the record, we find that it is arbitrary and capricious to issue an Incidental Take Statement for the razorback sucker when the Fish and Wildlife Service's speculation that the species exists on the property is not supported by the record. We agree with the district court's ruling that the Fish and Wildlife Service failed to establish an incidental taking because it did not have evidence that the razorback sucker even exists anywhere in the area. Where the agency purports to impose conditions on the lawful use of that land without showing [*39] that the species exists on it, it acts beyond its authority in violation of 5 U.S.C. §§ 706.2. **The Cactus Ferruginous Pygmy-owl** As with the razorback sucker, the record does not support a claim that the cactus ferruginous pygmy-owl exists in the area of the allotment in question, and the Fish and Wildlife Service thus acted in an arbitrary and capricious manner in issuing an Incidental Take Statement for that species. The Arizona population of the cactus ferruginous pygmy-owl, a small bird measuring about 6.75 inches long, was listed as endangered in 1997. Although the owl was historically found in small numbers throughout the geographic area at issue, no pygmy-owls were detected during 1997 surveys, and there had been no recent reports of pygmy-owls in most areas within the jurisdiction. Despite this, in the Biological Opinion, the Fish and Wildlife Service issued an Incidental Take Statement stating that take was anticipated due to habitat degradation that would "significantly impair essential behavioral patterns of the pygmy-owl including breeding, feeding, and/or sheltering, leading to possible injury or death of any pygmy-owls in the allotments."

[*40] Like the razorback sucker, the levels of anticipated take for the pygmy-owl could not be directly quantified, and thus, authorized take would be exceeded if habitat conditions deteriorated. The Fish and Wildlife Service argues on appeal that subsequent surveys show that "the Service correctly anticipated that the owl was present in the areas at issue." We first note that the Fish and Wildlife Service incorrectly assumes that a reviewing court may look outside the administrative record. See *Southwest Ctr. for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996) ("Judicial review of an agency decision typically focuses on the administrative record in existence at the time of the decision and does not encompass any

part of the record that is made initially in the reviewing court."). Considering evidence outside the record would render the extraordinarily complex consultation process, which includes reporting requirements and public comment periods, meaningless. It would also allow the consulting agency to produce far reaching and unsupported Biological Opinions knowing that it could search for evidentiary support if the opinion was later challenged. [*41] Furthermore, the Fish and Wildlife Service's own regulations do not contemplate this result, but instead mandate the reinitiation of consultation if circumstances change or new facts are discovered. 50 C.F.R. §§ 402.16. Thus, we review the Biological Opinion based upon the evidence contained in the administrative record. We agree with the district court that the Fish and Wildlife Service pointed to no evidence that established the existence of the pygmy-owl on the property in question. The Biological Opinion states, "while there have been no recent reports of pygmy-owls in most areas within the jurisdiction ... the numerous records provided above indicate that pygmy-owls were at one time found at least in small numbers." Moreover, the Biological Opinion acknowledges that "no pygmy-owls were detected during [1997] surveys." We also agree that the Fish and Wildlife Service failed to demonstrate how the habitat modification would "actually kill or injure" the owl given that "there have been no recent reports of pygmy-owls in most areas within the jurisdiction." We therefore affirm the district court's holding that there was no basis in fact for the Fish and [*42] Wildlife Service's decision to issue an Incidental Take Statement. Accordingly, the Incidental Take Statement, which anticipated takings of the pygmy-owl, likewise fails as arbitrary and capricious.

B. The ACGA II Consultation 1. The Issuance of Incidental Take Statements A. The Montana Allotment (Sonora chub) The Montana Allotment consists of 27,940 acres in the Coronado National Forest. Although the Montana Allotment Biological Opinion addresses the impact of grazing on the Sonora chub and the lesser long-nosed bat, the Fish and Wildlife Service appealed only the district court's finding as to the Sonora chub, a stream-dwelling member of the minnow family. In a relatively terse Biological Opinion, the Fish and Wildlife Service determined that the Sonora chub are present on the Montana Allotment, but that they are essentially confined to the California Gulch, an area from which livestock are excluded. Nonetheless, the Fish and Wildlife Service found that take "of Sonora chub is expected to result from the ongoing grazing activities on the Montana Allotment." The Biological Opinion projects both direct harm to individual fish that disperse into areas accessible to cattle [*43] and indirect harm stemming from habitat modification. With respect to direct harm, it concludes that, "during periods of high instream flow and fish dispersal, livestock may directly impact fish in the stream channel." The Biological Opinion is similarly sparse with respect to projected

indirect harms. It notes that the watershed is "naturally fragile and highly sensitive to disturbance ...[and] the effects of livestock grazing activities can be additive, exacerbating the naturally fragile and highly sensitive watershed conditions." The Biological Opinion also reports, however, that there are "improved soil and riparian area conditions" and that "range condition is generally good with an upward trend." Although the Biological Opinion states that "livestock currently have direct access to the stream channel immediately upstream of the enclosure" and "harm occurs through the effects to habitat that alter the suitability of the habitat to support Sonora chub," there is no information about how far upstream the enclosure is nor is there site specific data that connects grazing in the enclosure and sedimentation. The Biological Opinion also notes under "Cumulative Effects" that stray [*44] cattle could cross the Mexican-American border and access the area that the Sonora chub is thought to inhabit, thereby causing a direct taking. The Biological Opinion does not present any evidence that this has occurred either in the Montana Allotment or on similar properties. Because the Biological Opinion provides little factual support for its conclusion that an incidental taking is anticipated, we agree with the district court that the issuance of the Incidental Take Statement for the Sonora chub on the Montana Allotment was based only on the very speculative "potential" for these fish to move upstream and on the "potential" down-stream effects of grazing. We affirm the district court's holding that "the mere potential for harm, however, is insufficient." Without evidence that a take would occur as a result of livestock grazing, issuing an Incidental Take Statement imposing conditions on the otherwise lawful use of the land was arbitrary and capricious.

B. The Sears-Club/Chalk Mountain Allotment (Gila topminnow) The Fish and Wildlife Service has not documented the existence of Gila topminnow, a small fish that prefers shallow water, in the upper portion of Dutchman Grave [*45] Spring, located on the Sears-Club/Chalk Mountain Allotment. The topminnow are found, however, in the nearby lower reaches of Dutchman Grave Spring, on the Red Creek Allotment. Although the upper portion of the spring is separated from the lower portion by 1,000 feet of dry streambed and a partial barrier restricting upstream movement, the Fish and Wildlife Service concluded that upstream fish movement could be possible during some flows. Likewise, the Service recognized that grazing activities are unlikely to jeopardize the continued existence of the topminnow, but found that grazing on the upper spring could affect its suitability for any possible future reintroduction of Gila topminnow or any recolonization from the lower spring. As with the Montana Allotment, we find that the Incidental Take Statement is based on the mere potential of harm to the Gila topminnow, not on any harm that would occur. The Fish and Wildlife Service provided only speculative evidence as to how

these two-inch fish could travel upstream across 1,000 feet of dry streambed and over waterfalls (up to three feet high) to recolonize the area contained on the allotment. Such speculation is not a sufficient rational [*46] connection to survive judicial review. Accordingly, we agree with the district court's determination that the Fish and Wildlife Service's decision to issue an Incidental Take Statement for Gila top-minnow on the Sears-Club/Chalk Mountain Allotment was arbitrary and capricious.

C. The East Eagle Allotment (loach minnow and spikedeace) The East Eagle Allotment consists of 37,259 acres in the Apache-Sitgreaves National Forest. The East Eagle Biological Opinion notes that neither the loach minnow, a small fish that inhabits shallow, swift waters, nor the spikedeace, a small river-dwelling fish that rarely exceeds 2.95 inches in length, have been documented in any portion of Eagle Creek located in this allotment. Surveys in 1994, 1995, 1996, and 1997, however, recorded the presence of the loach minnow in Eagle Creek approximately three miles downstream from the allotment, and in Middle Prong Eagle Creek, approximately one mile downstream. The nearest known spikedeace habitat is twelve miles from the allotment. Although there is no current documentation that either species exists on the East Eagle Allotment, the Fish and Wildlife Service concluded that trailing livestock along and [*47] across creeks could potentially step on fish, larvae, and eggs, remove vegetation that could influence water temperature, or trample streambanks that could lead to changes in stream morphology. Again, the Fish and Wildlife Service defined the incidental take in terms of habitat characteristics, finding that take will be exceeded if several conditions are not met, including if "ecological conditions do not continue to improve or maintain good or better status." We find that the Fish and Wildlife Service did not have sufficient evidence of a take of either species to issue an Incidental Take Statement for the East Eagle Allotment. Because the only evidence contained in the Biological Opinion shows that neither species exists on the allotment, the Fish and Wildlife Service could not rationally conclude that a take would occur.

D. The Wildbunch Allotment (loach minnow) The Wildbunch Allotment consists of 23,085 acres in the Apache-Sitgreaves National Forest, bordered by the Blue River on the west and by the San Francisco River on the south. The Biological Opinion here addresses the effects of grazing on the loach minnow that exist in the Blue River and also are sporadically present [*48] in the San Francisco River. Livestock are geographically excluded from the portion of the Blue River that is within the allotment, and the San Francisco River is adjacent to, but not actually part of, the allotment. According to the Biological Opinion, although "livestock do not have direct access to any known occupied or potential loach minnow habitat on the Wildbunch Allotment ... increases in sedimentation into the Blue and San Francisco rivers from the allotment are expected as a result of ongoing livestock

grazing and alterations of runoff patterns." The Fish and Wildlife Service issued an Incidental Take Statement anticipating takings through "effects to habitat" and found that "incidental take of loach minnow associated with the proposed action cannot be directly quantified." As with the East Eagle Allotment, the Incidental Take Statement here concludes that incidental take will be exceeded if, among other things, "ecological conditions do not improve under the proposed livestock management." We affirm the district court's finding that the Fish and Wildlife Service acted arbitrarily and capriciously in issuing the Incidental Take Statement for loach minnow on the Wild-bunch [*49] Allotment. As with the allotments we previously addressed, the Fish and Wildlife Service considered only general evidence of the possible effects of livestock grazing on aquatic habitats. It proffered no basis to conclude that these negative effects were occurring on the aquatic habitats located on the Wildbunch Allotment or that such habitat modification would actually kill or injure the loach minnow.

E. The Cow Flat Allotment (loach minnow and

spikedace) According to the Biological Opinion, the Blue River passes through or adjacent to approximately 3.5 miles of the Cow Flat Allotment, made up of 22,592 acres in the Apache-Sitgreaves National Forest. Surveys conducted in 1994, 1995, and 1996 found loach minnow throughout the Blue River. The Fish and Wildlife Service concluded that the segment of the Blue River that passes through or adjacent to the Cow Flat Allotment is considered occupied loach minnow habitat. Having determined that loach minnow exist on the allotment, Fish and Wildlife Service determined that the loach minnow are vulnerable to direct harms resulting from cattle crossings, such as trampling. Moreover, because the fish use the spaces between large substrates [*50] for resting and spawning, sedimentation resulting from grazing in pastures that settles in these spaces can adversely affect loach minnow habitat. The Biological Opinion determines that this indirect effect, along with the direct crushing of loach minnow eggs and the reduction in food availability, will result in take of the loach minnow. The Incidental Take Statement, however, does not directly quantify the incidental takings of loach minnow and determines that such takings "will be difficult to detect."

Defining the incidental take in terms of habitat characteristics, the Fish and Wildlife Service found that take will be exceeded if several conditions are not met. One such condition was if

"ecological conditions do not improve under the proposed livestock management" plan. We agree with the district court that the issuance of the Cow Flat Incidental Take Statement was not arbitrary and capricious. Unlike the other allotments in question, the Fish and Wildlife Service provided evidence that the listed species exist on the land in question and that the cattle have access to the endangered species' habitat.

Accordingly, the Fish and Wildlife Service could reasonably conclude that the [*51] loach minnow could be harmed when the

livestock entered the river. Additionally, the Fish and Wildlife Service provided extensive site-specific information that discussed not only the topography of the relevant allotment, but the indirect effects of grazing on the species due to the topography. The specificity of the Service's data, as well as the articulated causal connections between the activity and the "actual killing or injury" of a protected species distinguishes the Fish and Wildlife Service's treatment of this allotment from the other allotments at issue in the two consultations. Thus, we hold that because the Fish and Wildlife Service articulated a rational connection between harm to the species and the land grazing activities at issue, the issuance of the Incidental Take Statements for the Cow Flat Allotment was not arbitrary and capricious.

2. The Anticipated Take Provisions We now turn to the question whether the Service acted arbitrarily and capriciously by failing to properly specify the amount of anticipated take in the Incidental Take Statement for the Cow Flat Allotment and by failing to provide a clear standard for determining when the authorized level of [*52] take has been exceeded. The district court upheld the Cow Flat take provision, including its conditions on the land use, issued by the Fish and Wildlife Service, finding that it was rationally connected to the proposed action of cattle grazing and thus did not violate the arbitrary and capricious standard. In general, Incidental Take Statements set forth a "trigger" that, when reached, results in an unacceptable level of incidental take, invalidating the safe harbor provision, and requiring the parties to reinitiate consultation. Ideally, this "trigger" should be a specific number. See, e.g., *Mausolf v. Babbitt*, 125 F.3d 661 (8th Cir. 1997) (snowmobiling activity may take no more than two wolves); *Fund for Animals v. Rice*, 85 F.3d 535 (11th Cir. 1996) (municipal landfill may take fifty-two snakes during construction and an additional two snakes per year thereafter); *Mt. Graham Red Squirrel v. Madigan*, 954 F.2d 1441 (9th Cir. 1992) (telescope construction may take six red squirrels per year); *Ctr. for Marine Conservation v. Brown*, 917 F. Supp. 1128 (S.D. Tex. 1996) (shrimping operation may take four hawksbill turtles, [*53] four leatherback turtles, ten Kemp's ridley turtles, ten green turtles, or 370 loggerhead turtles). Here, however, the "trigger" took the form of several conditions. We must therefore determine whether the linking of the level of permissible take to the conditions set forth in the various Incidental Take Statements was arbitrary and capricious. ACGA argues that the Incidental Take Statements fail to specify the amount or extent of authorized take with the required degree of exactness. Specifically, ACGA objected to the first condition:

The service concludes that incidental take of loach minnow from the proposed action will be considered to be exceeded if any of the following conditions are met:[Condition 1]

Ecological conditions do not improve under the proposed livestock management. Improving conditions can be defined through improvements in watershed, soil condition, trend and condition of rangelands (e.g., vegetative litter, plant vigor, and native species diversity), riparian conditions (e.g., vegetative and geomorphologic: bank, terrace, and flood plain conditions), and stream channel conditions (e.g., channel profile, embeddedness, water temperature, and base [*54] flow) within the natural capabilities of the landscape in all pastures on the allotment within the Blue River watershed.

We have never held that a numerical limit is required. Indeed, we have upheld Incidental Take Statements that used a combination of numbers and estimates. See *Ramsey v. Kantor*, 96 F.3d 434, 441 n.12 (9th Cir. 1996) (utilizing both harvesting rates and estimated numbers of fish to reach a permitted take); *Southwest Ctr. for Biological Diversity v. U.S. Bureau of Reclamation*, 6 F. Supp. 2d 1119 (D.Ariz. 1997) (concluding that an Incidental Take Statement that indexes the permissible take to successful completion of the reasonable and prudent measures as well as the terms and conditions is valid); *Pac. Northwest Generating Coop. v. Brown*, 822 F. Supp. 1479, 1510 (D.Or. 1993) (ruling that an Incidental Take Statement that defines the allotted take in percentage terms is valid). Moreover, while Congress indicated its preference for a numerical value, it anticipated situations in which impact could not be contemplated in terms of a precise number. See H.R. Rep. No. 97-567, at 27 (1982) ("The Committee does [*55] not intend that the Secretary will, in every instance, interpret the word impact to be a precise number. Where possible, the impact should be specified in terms of a numerical limitation."); see also 50 C.F.R. §§ 402.14 (defining impact as "the amount or extent, of such incidental taking on the species."). In the absence of a specific numerical value, however, the Fish and Wildlife Service must establish that no such numerical value could be practically obtained. We agree with the ACGA II court's conclusion that, "the use of ecological conditions as a surrogate for defining the amount or extent of incidental take is reasonable so long as these conditions are linked to the take of the protected species." Indeed, this finding is consistent with the Fish and Wildlife Service's Section 7 Consultation Handbook:

When preparing an incidental take statement, a specific number (for some species, expressed as an amount or extent, e.g., all turtle nests not found and moved by the approved relocation technique) or level of disturbance to habitat must be described. Take can be expressed also as a change in habitat characteristics affecting the species (e.g. [*56] , for an aquatic species, changes in water temperature or

chemistry, flows, or sediment loads) where data or information exists which links such changes to the take of the listed species. In some situations, the species itself or the effect on the species may be difficult to detect. However, some detectable measure of effect should be provided ... If a sufficient causal link is demonstrated (i.e., the number of burrows affected or a quantitative loss of cover, food, water quality, or symbionts), then this can establish a measure of the impact on the species or its habitat and provide the yardstick for reinitiation.

Final ESA Section 7 Consultation Handbook, March 1998 at 4-47 to 4-48. By "causal link" we do not mean that the Fish and Wildlife Service must demonstrate a specific number of takings; only that it must establish a link between the activity and the taking of species before setting forth specific conditions. ACGA argues that it is entitled to more certainty than "vague and undetectable criteria such as changes in a 22,000 acre allotment's 'ecological condition.'" In response, the Fish and Wildlife Service argues that "the [Incidental Take Statement] provides for [*57] those studies necessary to provide the quantification of impacts which the Cattle Growers claim is lacking." We disagree with the government's position. The Incidental Take Statements at issue here do not sufficiently discuss the causal connection between Condition 1 and the taking of the species at issue. Based on the Incidental Take Statement, if "ecological conditions do not improve," takings will occur. This vague analysis, however, cannot be what Congress contemplated when it anticipated that surrogate indices might be used in place of specific numbers. Moreover, whether there has been compliance with this vague directive is within the unfettered discretion of the Fish and Wildlife Service, leaving no method by which the applicant or the action agency can gauge their performance. Finally, Condition 1 leaves ACGA and the United States Forest Service responsible for the general ecological improvement of the approximately 22,000 acres that comprise the Cow Flat Allotment. Based upon the lack of an articulated, rational connection between Condition 1 and the taking of species, as well as the vagueness of the condition itself, we hold that its implementation was arbitrary and capricious. [*58] The terms of an Incidental Take Statement do not operate in a vacuum. To the contrary, they are integral parts of the statutory scheme, determining, among other things, when consultation must be reinitiated. Thus, even though the Fish and Wildlife Service was not arbitrary and capricious in issuing Incidental Take Statements for the Cow Flat Allotment, its failure to properly specify the amount of anticipated take and to provide a clear standard for determining when the authorized level of take has been exceeded is arbitrary and capricious. As with the Incidental Take Statements for the other allotments, we therefore conclude that the issuance of the Cow Flat Allotment

Incidental Take Statement was arbitrary and capricious.**VII.**

Conclusion For the foregoing reasons, the decision of the ACGA I district court is AFFIRMED, and the decision of the ACGA II district court is AFFIRMED in part, and REVERSED in part.